

TITLE
CATALYSTS FOR OLEFIN POLYMERIZATIONS

Abstract of the Disclosure

5 Transition metal complexes of selected monoanionic
phosphine ligands, which also contain a selected Group 15 or
16 (IUPAC) element and which are coordinated to a Group 3 to
11 (IUPAC) transition metal or a lanthanide metal, are po-
lymerization catalysts for the (co)polymerization of olefins
10 such as ethylene and α -olefins, and the copolymerization of
such olefins with polar group-containing olefins. These and
other nickel complexes of neutral and monoanionic bidentate
ligands copolymerize ethylene and polar comonomers, espe-
cially acrylates, at relatively high ethylene pressures and
15 surprisingly high temperatures, and give good incorporation
of the polar comonomers and good polymer productivity. These
copolymers are often unique structures, which are described.